

## EAST Search History

| Ref # | Hits | Search Query   | DBs                    | Default Operator | Plurals | Time Stamp       |
|-------|------|--|------------------------|------------------|---------|------------------|
| L1    | 1377 | 474/69 or 474/74 or 474/74 or 474/86 or 474/87 or 474/273 or 474/88 or 474/89 or 474/148 | US-PGPUB; USPAT        | ADJ              | ON      | 2009/02/06 13:44 |
| S1    | 0    | ("pulley.ab. and vibration").PN.   | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2009/02/04 16:46 |
| S2    | 0    | ("pulley.ab. and vibration").PN.   | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2009/02/04 16:46 |
| S3    | 1139 | pulley.ab. and vibration   | US-PGPUB; USPAT        | ADJ              | OFF     | 2009/02/04 16:47 |
| S4    | 251  | (pulley and irregular or non\$1circular).ab. and vibration                               | US-PGPUB; USPAT        | ADJ              | OFF     | 2009/02/04 16:56 |
| S5    | 23   | (pulley and irregular or non\$1circular).ab. and vibration and crankshaft                | US-PGPUB; USPAT        | ADJ              | OFF     | 2009/02/04 16:57 |
| S6    | 4    | (pulley and (irregular or non\$1circular or oval)).ab. and vibration and crankshaft      | US-PGPUB; USPAT        | ADJ              | OFF     | 2009/02/04 16:58 |
| S7    | 13   | (pulley and (irregular or non\$1circular or oval)).ab. and vibration                     | US-PGPUB; USPAT        | ADJ              | OFF     | 2009/02/04 16:58 |
| S8    | 78   | ((pulley or rotor) and (irregular or non \$1circular or oval)).ab. and vibration         | US-PGPUB; USPAT        | ADJ              | OFF     | 2009/02/04 17:03 |
| S9    | 2    | "20030104886"  | US-PGPUB; USPAT        | ADJ              | OFF     | 2009/02/04 17:07 |

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|-----|--------|--|--------------------------------------|-----|-----|---------------------|
| S10 | 34     | ("0515449"   "0571086"   "0613756"   "1650449"   "1936117"   "1963314"   "20030087714"   "2477441"   "2941413"   "3583250"   "3752035"   "3830212"   "3858454"   "4193324"   "4337056"   "4515577"   "4810237"   "4865577"   "4913684"   "5492390"   "5772546"   "5882025"   "5935046"   "6019692"   "6189639").PN. OR ("7044875").URPN. | US-PGPUB;<br>USPAT;<br>USOCR         | OR  | OFF | 2009/02/04<br>17:10 |
| S11 | 314668 | crankshaft pulley  | US-PGPUB;<br>USPAT;<br>USOCR         | OR  | OFF | 2009/02/04<br>19:07 |
| S12 | 7065   | crankshaft same pulley   | US-PGPUB;<br>USPAT;<br>USOCR         | ADJ | OFF | 2009/02/04<br>19:07 |
| S13 | 1362   | crankshaft same pulley and vibration   | US-PGPUB;<br>USPAT;<br>USOCR         | ADJ | OFF | 2009/02/04<br>19:07 |
| S14 | 2      | "2001304374"   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO | ADJ | OFF | 2009/02/04<br>19:11 |
| S15 | 362    | pulley.ab. and vibration and crankshaft  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO | ADJ | OFF | 2009/02/04<br>20:20 |
| S16 | 7      | ("1650449").URPN.  | USPAT                                | OR  | OFF | 2009/02/04<br>20:58 |
| S17 | 31     | ("0524830"   "0679076"   "0724450"   "1486590"   "1650449"   "2421368").PN. OR ("3867851").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR         | OR  | OFF | 2009/02/04<br>21:04 |
| S18 | 71622  | adjustable and (oval or irregular or non \$1circular)  | US-PGPUB;<br>USPAT;<br>USOCR         | ADJ | OFF | 2009/02/04<br>21:18 |
| S19 | 10295  | adjustable and (oval or irregular or non \$1circular) and (pulley or rotor)  | US-PGPUB;<br>USPAT;<br>USOCR         | ADJ | OFF | 2009/02/04<br>21:18 |

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| S20 | 34   | adjustable and ((oval or irregular or non\$1circular) and (pulley or rotor)).ab.   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/04<br>21:18 |
| S21 | 279  | ((oval or irregular or non\$1circular) and (pulley or rotor)).ab.  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/04<br>21:22 |
| S22 | 24   | ("1079082"  <br>"1416078"   "1946787"<br>  "2786540"  <br>"3370889"   "3459454"<br>  "3802743"  <br>"4046339").PN. OR<br>("5492390").URPN. | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2009/02/05<br>12:47 |
| S23 | 113  | electric motor and<br>brushes and linear<br>actuator   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>13:17 |
| S24 | 1367 | memory alloy near4<br>actuator   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>13:39 |
| S25 | 812  | memory alloy near4<br>actuator and linear  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>13:39 |
| S26 | 840  | shape memory alloy<br>near4 actuator and<br>linear   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>13:40 |
| S27 | 494  | organic resin and<br>wheel   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>13:52 |
| S28 | 0    | "wheel.ab.organic"<br>resin and wheel  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>13:52 |
| S29 | 0    | "wheel.ab. andorganic"<br>resin and wheel  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>13:52 |
| S30 | 0    | "wheel.ab. and<br>organic" resin and<br>wheel  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>13:52 |
| S31 | 46   | wheel.ab. and organic<br>resin and wheel   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>13:52 |
| S32 | 15   | shape memory alloy<br>near4 actuator and<br>linear and brushes   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>15:11 |
| S33 | 388  | piezoelectric stacks   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>15:20 |

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|-----|--------|---|------------------------------|-----|-----|---------------------|
| S34 | 243    | piezoelectric stacks and actuator   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>15:21 |
| S35 | 5      | piezoelectric stacks and actuator and pulley  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>15:24 |
| S36 | 473    | pulley.ab. and opening and vibration  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>15:25 |
| S37 | 1040   | pulley.ab. and centrifugal  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>15:40 |
| S38 | 24     | ("2092469"  <br>"2145083"   "2678566"<br>  "2699071"  <br>"2790525"   "2987934"<br>  "3161071"  <br>"3287987"   "3393572"<br>  "3605511"  <br>"3884316"  <br>"3996811").PN. OR<br>("4310322").URPN. | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2009/02/05<br>15:52 |
| S39 | 5      | "5520583"   | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2009/02/05<br>16:31 |
| S40 | 17     | ("0616630"  <br>"0663928"   "3969948"<br>  "4342559"  <br>"4373926"   "4530676"<br>  "4652250"  <br>"4741546"   "4832660"<br>  "4836046"  <br>"5407395").PN. OR<br>("5520583").URPN.                | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2009/02/05<br>16:32 |
| S41 | 2466   | (rotor or pulley).ab. and centrifugal and vibration   | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2009/02/05<br>16:36 |
| S42 | 503    | (rotor or pulley).ab. and centrifugal and vibration and belt  | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2009/02/05<br>16:39 |
| S43 | 222171 | piezoelectric stacks  | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2009/02/05<br>17:38 |
| S44 | 388    | piezoelectric stacks  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>17:38 |
| S45 | 2680   | (hydraulic cylinder).ab. and spring   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | OFF | 2009/02/05<br>19:37 |

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|-----|------|--|-----------------|-----|-----|------------------|
| S46 | 403  | (pulley or rotor) and (vibration or balancing) and crankshaft and (orientation or oriented)            | USPAT           | OR  | OFF | 2009/02/05 20:45 |
| S47 | 752  | (pulley or rotor) and (vibration or balancing) and crankshaft and (orientation or oriented)            | US-PGPUB; USPAT | ADJ | ON  | 2009/02/05 20:45 |
| S48 | 23   | (pulley or rotor) and (vibration or balancing) and crankshaft and (orientation or oriented) and keyway | US-PGPUB; USPAT | ADJ | ON  | 2009/02/05 20:53 |
| S49 | 3281 | (oval or irregular or non \$1circular) and crankshaft  | US-PGPUB; USPAT | ADJ | ON  | 2009/02/06 12:01 |

2/ 6/ 2009 1:49:55 PM

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